

U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATION STATUS CHANGE SUMMARY

| Report: | Evergreen Packaging Paper Mill – Fire During Hot Work |
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| Recommendation Number: | 2020-07-I-NC-R8 |
| Date Issued: | September 24, 2021 |
| Recipient: | Universal Blastco |
| New Status: | Closed – Acceptable Action |
| Date of Status Change: | September 23, 2024 |

Recommendation Text:

Develop a policy and standard operating procedures for the proper use of heat guns in FRP [fiber-reinforced plastic] operations.

Board Status Change Decision:

A. Rationale for Recommendation

On September 21, 2020, a paper mill operated by Evergreen Packaging (Evergreen) in Canton, North Carolina, was undergoing a planned shutdown, and associated maintenance and capital project work was ongoing throughout the facility. In one of Evergreen's pulp bleaching units, two contract companies were performing simultaneous maintenance work inside two connected process vessels, called an "upflow tower" and a "downflow tower," when a fire started inside the upflow tower after an electric heat gun, which was being used to warm resin, fell into a fivegallon bucket containing the flammable resin. The fire fatally injured two contractors.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found that the workers did not recognize or control the ignition hazard presented by the electric heat gun. The CSB also found that one of the contractors, Universal Blastco, did not conduct effective pre-job planning, such as considering the potential for poor performance of the resin in cold temperatures and identifying solutions to avoid or correct the problem. The CSB concluded that to assist with pre-job planning efforts, a Universal Blastco troubleshooting guide or standard operating procedure addressing resin gel time could prevent a similar incident in the future. As a result of the investigations, the CSB issued three recommendations to Evergreen Packaging. This status change summary addresses CSB Recommendation No. 2020-07-I-NC-R8.

B. Response to the Recommendation

Universal Blastco provided the CSB with an updated Heat Gun Standard Operating Procedure (SOP) that provides guidelines for the safe use of heat guns. The SOP states that the use of heat guns requires a hot work permit and to never use the heat gun in a confined space with flammable liquids or fumes present. The SOP also provides operating sequences that describe the steps for safely and effectively operating a heat gun during operations.

C. Board Analysis and Decision

Based upon the information above, the Board voted to change the status of CSB Recommendation No. 2020-07-I-NC-R8 to: "Closed – Acceptable Action."